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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

SULLIVAN, DANIELLE D

ART UNIT

PAPER NUMBER

1616

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DELIVERY MODE

06/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,276

**Applicant(s)**

ANDERSCH ET AL.

**Examiner**

DANIELLE SULLIVAN

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
- Paper No(s)/Mail Date 4/14/2009
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 6-15 are pending examination. Claims 13-15 were added in the amendment filed 4/14/2009.

#### ***Withdrawn rejections***

Applicant's amendments and arguments filed 4/14/2009 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below are herein withdrawn.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (US 2003/0013684) in view of Nauen et al. (Thiamethoxam is a Neonicotinoid Precursor Converted to Clothianidin in Insects and Plants, 2003).

#### **Applicant's Invention**

Applicant claims a method of controlling insects, arachnids, or nematodes by contacting them with a synergistic mixture comprising imidacloprid and clothianidin,

where the ratio of imidacloprid to clothianidin is from 10:1 to 1:10. Claim 7 further limits the step of contacting to the seeds of plants.

Applicant claims a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10. Claim 14 specifies the weight ratio of imidacloprid to clothianidin is 1 to 1.

Applicants claim a method of protecting seeds or growing plants by contacting them with a composition comprising imidacloprid and clothianidin from 10:1 to 1:10. Claim 10 is directed to a seed treated with the composition.

Applicants claim a method of making pesticides by mixing a combination of imidacloprid and clothianidin together in a ratio of from 10:1 to 1:10 with one or more extenders and/or one or more surfactants. Claims 13-15 specify the ratio of imidacloprid and clothianidin is 1:1.

**Determination of the scope and the content of the prior art  
(MPEP 2141.01)**

Kawahara et al. teach an agricultural composition comprising an insecticide having nitromethylene, nitroimino or cyanoimino groups [0020]. The insecticides include imidacloprid, nitenpyram, thiacloprid, acetamiprid, thiamethoxam, clothianidin and dinotefuran [0010]. Kawahara et al. teach an agricultural composition comprising at least one selected from nitenpyram, acetamiprid and dinotefuran [0021-0027]. Kawahara et al. teach a process for controlling insects by applying a pesticidal composition having a nitromethylene, nitroimino or cyanoimino group to the stems and

leaves of a plant or to the soil around the planting site [0031]. The chemical substance can be used to treat seeds by immersion or dressing [0062]. Examples of the chemical substance comprising nitenpyram 84%, acetamiprid 4200 ppm, thiamethoxam (4100) and dinotefuran (54000 ppm) are disclosed [0035]. Kawahara et al. teach the formulation may comprise surfactants, wetting agents and other additives [0049].

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

Kawahara et al. does not disclose a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10, specifically 1:1. It is for this reason that Nauen et al. is joined.

Nauen et al. teach neonicotinoid insecticides are active against numerous sucking and biting pest insects including aphids and whiteflies (page 56, column 1, paragraph 1). Table 2 discloses the efficacy of clothianidin and imidacloprid as 1.28 and 1.09 respectively. Imidacloprid and clothianidin showed similar efficacy against *M. persicae* in leaf-dip bioassays (page 60, column 1, paragraph 1).

**Finding of prima facie obviousness  
Rationale and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Kawahara et al. and Nauen et al. to formulate a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10, specifically 1:1. One would have been motivated to include one of these combinations

because Nauen et al. teach that imidacloprid and clothianidin showed similar efficacy against *M. persicae* in leaf-dip bioassays. It would be prima facie obvious to combine the two compositions each of which is taught by Nauen et al. showed similar efficacy against *M. persica* at a rate of 1.28 and 1.09, respectively. See In re Kerkhoven 205 USPQ 1069, (C.C.P.A. 1980). Thus, combining imidacloprid with clothianidin in a 1:1 ratio is prima facie obvious.

Claims 8, 11, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (US 2001/0046986) in view of Nauen et al. (Thiamethoxam is a Neonicotinoid Precursor Converted to Clothianidin in Insects and Plants, 2003).

### **Applicant's Invention**

Applicant claims a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10. Claim 14 specifies the weight ratio of imidacloprid to clothianidin is 1 to 1.

Applicant claims a method of controlling animal pests by contacting them with the composition.

Applicants claim a method of making pesticides by mixing imidacloprid and clothianidin together in a ratio of from 10:1 to 1:10 with one or more extenders and/or one or more surfactants. Claim 15 specifies the ratio of imidacloprid and clothianidin is 1:1.

### **Determination of the scope and the content of the prior art**

**(MPEP 2141.01)**

Miura et al. teach a method of controlling flies that live in livestock pens or poultry houses by using an insecticidal composition as poisoned bait [0013] and [0048]. The composition may be sprinkled or sprayed in the air to exterminate flying adult flies or their larvae [0047]. The insecticides include one or more compounds selected from imidacloprid, nitenpyram, thiacloprid, acetamiprid, thiamethoxam, clothianidin and dinotefuran [0016] and [0029]. The composition may include further additives and surfactants [0038-0042].

**Ascertainment of the difference between the prior art and the claims**

**(MPEP 2141.02)**

Miura et al. do not disclose a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10, specifically 1:1. It is for this reason that Nauen et al. is joined.

Nauen et al. teach neonicotinoid insecticides are active against numerous sucking and biting pest insects including aphids and whiteflies (page 56, column 1, paragraph 1). Table 2 discloses the efficacy of clothianidin and imidacloprid as 1.28 and 1.09 respectively. Imidacloprid and clothianidin showed similar efficacy against *M. persicae* in leaf-dip bioassays (page 60, column 1, paragraph 1).

**Finding of prima facie obviousness**

**Rationale and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Miura et al. and Nauen et al. to formulate a synergistic composition comprising imidacloprid and clothianidin from 10:1 to 1:10, specifically 1:1. One would have been motivated to include one of these combinations because Nauen et al. teach that imidacloprid and clothianidin showed similar efficacy against *M. persicae* in leaf-dip bioassays. It would be prima facie obvious to combine the two compositions each of which is taught by Nauen et al. showed similar efficacy against *M. persica* at a rate of 1.28 and 1.09, respectively. See In re Kerkhoven 205 USPQ 1069, (C.C.P.A. 1980). Thus, combining imidacloprid with clothianidin in a 1:1 ratio is prima facie obvious.

#### ***Response to Arguments***

Applicant's arguments filed 4/14/2009 have been fully considered but they are not persuasive. Applicant's argue that the specification demonstrates unexpected results. Applicants argue that Table K-N demonstrates synergy. The Examiner agrees that Table K-N demonstrate synergy for a method of controlling whitefly, caterpillars and green peach aphids by contacting the insects with a composition comprising imidacloprid and clothianidin in a 1:1 ratio. However, the Examiner does not agree that this showing is commensurate in scope with the present claims. The present claims recite contacting insects, arachnids and nematodes with a composition comprising imidacloprid and clothianidin in a ratio of from 10:1 to 1:10.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan  
Patent Examiner  
Art Unit 1616

/Mina Haghighatian/  
Primary Examiner, Art Unit 1616